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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/629,170	07/31/2000	Michael J. Matsko	8613	4796

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EXAMINER

SHAFFER, ERIC T

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 05/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/629,170

Applicant(s)

MATSKO, MICHAEL J.

Examiner

Eric T. Shaffer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 10 & 13 - 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6 - 8, & 13 - 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) 4, 5, 9, 10 & 20 - 22 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is in response to the amendments filed September 23, 2003.

Summary Of Instant Office Action

2. Applicant's arguments, filed February 5, 2004, concerning claims 1 – 22 in the Office Action mailed November 25, 2003, have been considered and deemed persuasive.

Claims 11 and 12 have been cancelled by the applicant and the applicant has added the new claims of 15 - 22. Claims 1 – 3, 6 – 8 and 13 – 19 are pending in this application and claims 4, 5, 9, 10 and 20 – 22 have been withdrawn from consideration as being non-elected.

Election/Restriction

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I Claims 1 – 3, 6 – 8 and 13 – 19 are drawn to a system to evaluate the performance of a human cash register operator or cashier at a point of sales POS terminal, classified in class 705, subclass 11.

II Claims 4, 5, 9, 10 and 20 – 22 are drawn to a system to evaluate the performance of a hardware component of a cash register at a point of sale POS terminal, classified in class 705, subclass 16.

4. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the case, invention I has a utility, such as collecting data from a cash register terminal and using it to evaluate the performance of a cash register operator in the job of

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a cashier. Invention II has a separate utility, such as evaluating the performance of cash register terminal hardware.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Election was made by Applicant's representative, Peter Priest, on April 23, 2004. Group I was elected.

Claim Rejections - 35 USC § 101

5. Claims 1, 2, 3, 13 and 15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory (i.e. abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts within the body of the claims.

Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply,

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involve, use or advance the underlying process. In the present case, claim 1 recites evaluating the performance of a cashier at a POS station, which could be interpreted as a street vendor performing a sales transaction without involving or using technology and thus the invention is outside of the technological arts. Furthermore, in the applicant's claimed series of transactions listed as scan, weigh, key or tender operation, the use of the word or implies that only one of the listed four operations needs to be used, and the tender operation can be performed by a street vendor without the use of technology. In order for an invention to be statutory, the claimed invention must, be in the technological arts. While the resulting evaluation of a cashier is a useful, concrete and tangible result, said result is arrived at without the use of technology. Thus, claims 1, 2, 3, 13 and 15 are not statutory.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 – 3, 6 – 8 and 13 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable by Green (GB 2306025) in view of Jones (US 5,832,458) and in further view of Engler et al (US 6,633,851).

8. As per claims 1, 6, 7 and 16, Green teaches a computer implemented method, system and medium for evaluating the performance of a cashier operating a point of sale (POS) station (the

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present invention has as its primary object the provision of enhanced systems and methods for clerk evaluation in plural station POS arrangements, page 2, lines 5 - 7), an input comprising the steps of:

a processor for receiving and transmitting data ("CPU provides input to and receives input from display unit", page 5, lines 16 - 17);

a memory coupled to the processor, the memory having stored therein sequences of instructions which, when executed by the processor, ("memory is selectively read by CPU", page 5, line 7) cause the processor to perform the steps of:

receiving an input indicative of an event occurring at the POS station wherein the event occurring at the POS station is a scan operation, a weighing operation, a key operation, or a tender operation ("checkout counters at the exit of a facility, each equipped with a clerk-controlled POS station effecting checkout of articles through bar code scanning", page 1, lines 13 - 15);

recording an entry record in response to the input received the entry record including a time stamp ("storing transaction information from all participating POS stations", page 2, lines 20 - 21);

determining a retail performance metric and a retail performance metric type ("the critique parameters, implemented by a supervisory person assigned to this purpose at the parent level computer, including such concerns as the facility may have for efficiency of the clerk, attributable to low transactional volume with time, clerk fraud, etc", page 1, lines 23 - 27) based on the input received at the POS station ("transaction information is typically transmitted from each POS station to a parent level computer", page 1, lines 21 - 22), wherein the critique

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parameters are performance metrics and the transaction volume with time is a calculated performance metric using time;

storing the retail performance metric records associated with the entry record for utilization in evaluating the performance of the cashier operating the POS station (“store transaction information from participating POS clerks cross-correlated with identifying indica”, page 8, lines 9 - 10);

instructions which, when executed by the processor, cause the processor to record the entry record including an entry identifier field (“CPU first reads the identification information from the memory and presents the same”, page 6) and to record the retail transaction data and link it to a cashier, (“In system usage, CPU directs the POS stations to transmit clerk identification and transaction information to memory and the memory stores the transaction information cross-correlated with the clerk identification information”, page 6), wherein the transaction information comprises (“efficiency of the clerk, attributable to low transaction volume with time, clerk fraud, etc”, page1); wherein the transaction volume with time is a performance metric.

Green does not teach any specific retail performance metrics as being calculated and recorded with the transaction.

Jones teaches a system that gathers retail POS information by use of bar code scanning (“the present invention may be used in any retail stores that utilize Point-Of-Sale (POS) optical scanners in their normal retail store operation to detect bar coded information”, column 6, lines 31 - 33). Jones also teaches storing transaction data for individual register, (“electronic audit system builds a copy of the complete transaction it is recording. For example, when a retail

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product is scanned by scanner/register, a signal is passed by store loop to ISP identifying the specific scanner/register involved in that transaction”, column 9, lines 60 - 64). Jones also teaches storing the data used in calculating a performance metric (“the time of day and date of transaction, the U.P.C. of each retail product involved in the transaction including overrides”, column 5, lines 55 - 57). Furthermore, Jones also teaches associating the retail performance metric record (“extremely high coupon activity, extremely fast total transaction times, sometimes indicative of fraudulent misredemptions, non-normal variations in UPC distributions and high frequency of manual overrides”, column 10, lines 54 – 57) with the entry record (“electronic audit system monitors passively the transaction and records both scanned items and the scanned coupon codes regardless of disposition or overrides. It also monitors/tracks which register is open, which cashier is on the register via POS loop internal data along with time of day, day of week, month and year”, column 10, line 13 - 18);

Both inventions are analogous art because they both recite receiving bar code scanned retail input information, monitoring and recording transactions at POS terminals and use this data to evaluate the performance of a cashier while both also recite clerk fraud as one of the problems the technology is trying to solve.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Green invention with the Jones invention in order to create a device that gathers transaction information and records information that performance metrics from which performance metrics may be calculated. It would be obvious to do this in order to use sales data to evaluate the performance of cashiers in a manner that evaluates their work in a live, real time environment. This would be useful in identifying cashiers that are not working at a fast

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enough speed, that are making errors and to combat fraud, each of which function would serve to save a business money.

Neither Green nor Jones teaches the actual calculation of a performance metric and storing the calculated metric with a transaction record.

Engler et al teaches recording a retail performance metric record including the retail performance metric and the retail performance metric type during a transaction the retail performance metric including the time elapsed waiting for and receiving input (“overringing dollars, overringing percent, number of overringings, delete dollars, delete percent, number of deletes, drive through time, counter time”, column 12, lines 56 - 58), wherein dollars, percentages and times are calculated retail performance metrics and counter time is the time required to enter input. Engler also teaches linking the record with a specific cashier (“the identification of POS scanner/register, at which the transaction occurred, an identification of the cashier on the POS scanner/register by cashier code”, column 12, lines 58 - 61). All three inventions are analogous art because they all use cash register transactions made at a POS terminal to evaluate the speed, accuracy or fraud of a cashier.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Engler invention with the combination of the Green and Jones invention in order to link the individual performance metrics with the transactions from which said metrics were derived. This would allow the specific time of day and cashier at a moment in time to be evaluated in a real world environment, thereby increasing the accuracy of the performance evaluation system. This would also increase the granularity of the data and allow the user to see if individual cashier performance of speed and accuracy varies with time of day,

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day of week or with types of items scanned, thereby increasing the usefulness of the evaluation device.

9. As per claims 2, 3, 8, 18 and 19, Green teaches the method, system and computer operable medium wherein the retail transaction data in a record is associated with a clerk, (“storing transaction information from all participating POS stations with clerk identities”); wherein the transaction data and the clerk identity would uniquely identify an individual transaction.

Green does not teach a entry identifier, a type field, and a time field.

Jones teaches a set of fields to identify a transaction (“data corresponding to the identification of a specific retail store, the time of day and date of the transaction”, column 5, lines 54 - 56) and (“an identification of the cashier on th POS scanner/register by cashier identification code”, column 5, lines 60 - 61), wherein the combination of a specific day, time, store and cashier creates a unique combination of fields that uniquely identifies a given transaction record. Green also teaches different types of performance metric data (“coupon redemptions including overrides, sales taxes, method of payment, returns and/or voided purchases or transactions”, column 5, lines 61 - 64), wherein the time of day data can be used to calculate the length of a transaction or the length of time between transactions, and the overrides and voided transactions can be counted or summed to measure cashier performance. Both inventions are analogous art because they both collect transaction data from a POS terminal that may be used to evaluate the performance of a cashier.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the data collection method of the Green invention and use it to collect the specific data taught by the Jones invention in order to create a system that evaluates the performance of cashiers in terms of speed, accuracy and fraud. Such an invention would have the usefulness of identifying employees who are under performing or are committing fraud, thereby saving a user of the invention money.

Neither Green nor Jones teaches a time field.

Engler teaches a system that uses transaction data from a POS display to evaluate the performance of a cashier, where Engler also incorporates a time field (“drive through time, counter time”, column 12, line 58). All three inventions are analogous art because they all use cash register transactions made at a POS terminal to evaluate the speed, accuracy or fraud of a cashier. Furthermore, Jones teaches a time of day and Engler teaches a time field.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the data analysis of the Engler invention with the data collection method of the Green and Jones inventions in order to perform specific time based analysis of cashiers. This would allow a user to determine which cashiers were the fastest or slowest in a specific cashier position. This would allow a user to have a basis for assigning cashiers to specific checkout lines and time of day shifts based on speed, thereby increasing the productivity of the cashier staff,

10. As per claims 13 and 14, Green teaches the method and system where cashier identification information and transaction information indicative of cashier performance is

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collected by a processor and stored in memory. Green does not teach any specific retail performance metrics as being calculated and recorded with the transaction.

Jones teaches a system that gathers retail POS information by use of bar code scanning (“the present invention may be used in any retail stores that utilize Point-Of-Sale (POS) optical scanners in their normal retail store operation to detect bar coded information”, column 6, lines 31 - 33). Jones also teaches storing transaction data for individual register, (“electronic audit system builds a copy of the complete transaction it is recording. For example, when a retail product is scanned by scanner/register, a signal is passed by store loop to ISP identifying the specific scanner/register involved in that transaction”, column 9, lines 60 - 64). Jones also teaches storing the data used in calculating a performance metric (“the time of day and date of transaction, the U.P.C. of each retail product involved in the transaction including overrides”, column 5, lines 55 - 57). Furthermore, Jones also teaches several types of performance metrics such as (“extremely high coupon activity, extremely fast total transaction times, sometimes indicative of fraudulent misredemptions, non-normal variations in UPC distributions and high frequency of manual overrides”, column 10, lines 54 - 57) with the entry record (“electronic audit system monitors passively the transaction and records both scanned items and the scanned coupon codes regardless of disposition or overrides. It also monitors/tracks which register is open, which cashier is on the register via POS loop internal data along with time of day, day of week, month and year”, column 10, line 13 - 18);

Both inventions are analogous art because they both recite receiving bar code scanned retail input information, monitoring and recording transactions at POS terminals and also recite clerk fraud as one of the problems the technology is trying to solve.

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• It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Green invention with the Jones invention in order to create a device that gathers transaction information and records information that performance metrics from which performance metrics may be calculated. It would be obvious to do this in order to use sales data to evaluate the performance of cashiers in a manner that evaluates their work in a live, real time environment. This would be useful in identifying cashiers that are not working at a fast enough speed, that are making errors and to combat fraud, each of which function would serve to save a business money.

Neither Green nor Jones teaches the a performance metric that is of time types.

Engler et al teaches recording a retail performance metric record including the retail performance metric and the retail performance metric type during a transaction the retail performance metric including the time elapsed waiting for and receiving input (“overringing dollars, overringing percent, number of overringings, delete dollars, delete percent, number of deletes, drive through time, counter time”, column 12, lines 56 - 58), wherein dollars, percentages and times are calculated retail performance metrics and counter time is the time required to enter input. Engler also teaches linking the record with a specific cashier (“the identification of POS scanner/register, at which the transaction occurred, an identification of the cashier on the POS scanner/register by cashier code”, column 12, lines 58 - 61). All three inventions are analogous art because they all use cash register transactions made at a POS terminal to evaluate the time, speed, accuracy or fraud of a cashier.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Engler invention with the combination of the Green and Jones

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invention in order to link the individual performance metrics with the transactions from which said metrics were derived. This would allow the specific time of day and cashier at a moment in time to be evaluated in a real world environment, thereby increasing the accuracy of the performance evaluation system. This would also increase the granularity of the data and allow the user to see if individual cashier performance of speed and accuracy varies with time of day, day of week or with types of items scanned, thereby increasing the usefulness of the evaluation device.

11. As per claims 15 and 17, Green teaches the method and computer operable medium wherein the entry record and the retail performance metric record are written to the same transaction log ("In system usage, CPU directs the POS stations to transmit clerk identification and transaction information to memory and the memory stores the transaction information cross-correlated with the clerk identification information", page 6), wherein the transaction information comprises ("efficiency of the clerk, attributable to low transaction volume with time, clerk fraud, etc", page1); wherein the transaction volume with time is a performance metric and the computer memory consists of a transaction log.

Response to Amendments

12. Applicants arguments have been considered and deemed persuasive.

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Conclusion

13. No claims were allowed and all claims were rejected.
14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Walker (US 6,567,787) – Determining if message spoken at a POS terminal

Iguchi (US 6,687,680) – Electronic cash register

Zachr et al (US 3,686,637) – Retail terminal

Nama (US 4,991,008) – Automatic surveillance system

Ito et al (US 4,774,662) – Method of managerial clerk inspection

Riordan et al (US 6,078,891) – System for collecting marketing data

Edmead, Mark T., Hinsberg, Paul, "Performance Monitor Counters",

www.microsoft.com

15. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric Shaffer whose telephone number is (703) 305-5283. The Examiner can normally be reached on Monday-Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks
Washington D.C. 20231

Or faxed to:

(703) 746-7238 [After Final communications, labeled "Box AF"]

(703) 746-7239 [Official communications]

(703) 706-9124 [Informal/Draft communications, labeled
"PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 7th floor receptionist.

ETS
April 30, 2004


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